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ABSTRACT

One of the major components in the overall model for evaluating Michigan State University's five alternative teacher preparation programs was an examination of each program's curriculum. In addition to a clear statement of program goals and subgoals, the examination called for an analysis of faculty interpretation of program goals in suggesting specific areas of professional knowledge or specific educational beliefs that should be emphasized in each program. Forty-three faculty members (53 percent) across the five programs completed the Teacher Knowledge and Beliefs Inventory (TKBI) consisting of 56 items representing aspects of professional knowledge that might be emphasized in a teacher preparation program, and 50 items representing beliefs that might be acquired. Both sections of the instrument were organized by the "commonplaces" of education: pupils, milieu, curriculum, and teachers. In addition, a fifth category was included in the knowledge section to reflect knowledge of teaching strategies. Results indicated that the teachers differed primarily in the level of importance attributed to areas of professional knowledge within the general categories of curriculum and milieu. Faculty perceptions of how beliefs should be presented did not differ significantly across programs. However, faculty in the Academic Learning program were significantly less likely to indicate that it was crucial for the program to consider opinions/beliefs cited in the TKBI survey. (JD)

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Research and Evaluation in Teacher Education

Program Evaluation Series No. 1

FACULTY INTERPRETATIONS OF THE GOALS OF MSU's ALTERNATIVE TEACHER PREPARATION PROGRAM

Joe Byers & Don Freeman

Department of Teacher Education
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Program Evaluation Series No. 1

FACULTY INTERPRETATIONS OF THE GOALS OF MSU's ALTERNATIVE TEACHER PREPARATION PROGRAM

Joe Byers & Don Freeman

FACULTY INTERPRETATIONS OF THE INSTRUCTIONAL GOALS OF MSU'S ALTERNATIVE TEACHER PREPARATION PROGRAMS

Joe Byers and Don Freeman

I. Introduction:

One of the major components in the overall model for evaluating Michigan State University's alternative teacher preparation programs is an examination of each program's curriculum. In addition to a clear statement of program goals and subgoals, this examination calls for an analysis of faculty interpretations of program goals in suggesting specific areas of professional knowledge or specific educational beliefs that should be emphasized in each program. Toward this end, faculty in each program were asked to complete the Teacher Knowledge and Beliefs Inventory (TKBI). This report focuses on comparisons of faculty responses to the TKBI across the five programs. Although these analyses are exploratory in nature, the results provide a preliminary sense of the extent to which faculty have translated program goals into distinctive content emphases for each alternative program.

II. The Teacher Knowledge and Beliefs Inventory:

The Teacher Knowledge and Beliefs Inventory consists of 56 items representing aspects of professional knowledge that might be emphasized in a teacher preparation program and 50 items representing beliefs that might be acquired. Both of these sections of the instrument are organized by Schwab's (1960) commonplaces of education: pupils, milieu, curriculum, and teachers. In addition, a fifth category is included in the knowledge section to reflect knowledge of teaching strategies (see Table 1).

TABLE 1

ITEM-FORM TYPES AND FREQUENCY FOR
THE KNOWLEDGE AND BELIEFS INVENTORY

Pedagogical Areas	Knowledge	Beliefs
Pupils	12	15
Milieu	12	11
Curriculum	11	12
Teachers	7	12
Teaching Strategies	14	xx
Totals	56	50

For items that describe specific areas of professional knowledge such as "basic principles of learning," faculty are asked to indicate on a five point scale "How important is it for participants in this program to acquire a substantial working knowledge of (each area)..." The five response categories are: crucial, very important, important, somewhat important, and not important.

The beliefs section of the instrument consists of declarative statements such as:

Subject-matter courses should stress the way knowledge is developed and tested in the corresponding academic disciplines (e.g., why statements are or are not accepted as historical facts).

In responding to each item, faculty are initially asked to indicate if program goals suggest that graduates should agree, disagree, or form their own position in regard to the statement. Faculty are then asked to judge the importance of addressing the belief in the program (using the same five point scale as for the knowledge items). For items in both the knowledge and the

beliefs sections, respondents can indicate that their interpretation of program goals does not provide sufficient information to respond.

III. Participating Faculty:

Lists of faculty associated with each alternative teacher education program were compiled and integrated into a single master list. Faculty members associated with more than one program completed the TKBI for the program of their primary affiliation. Overall, 55% of those receiving the TKBI returned a completed questionnaire. Table 2 summarizes the return rates for each program. Rates of return ranged from a high of 82% for the Multiple Perspectives Program to a low of 35% for the Academic Learning program. The small number of returns from faculty in Academic Learning and Learning Communities raises some concerns about potential bias and stability of available data for these two programs.

TABLE 2

NUMBER OF FACULTY ASSOCIATED WITH VARIOUS TEACHER EDUCATION PROGRAMS

Teacher Education Program	# Primary Faculty Affiliates	Number of Respondents	Pct. Returned
Standard	19	12	63.16
Academic Learning	17	6	35.29
Heterogeneous Classrooms	14	9	64.29
Learning Communities	17	7	41.18
Multiple Perspectives	11	9	81.82
Totals	**78**	**43***	**53.13**

* as of 4/10/83

IV. Data Reduction and Analysis:

To provide a general picture of results, four indices were determined for each commonplace category. First, the percent of items marked "crucial" within each of the knowledge categories was calculated. These measures reflect the degree to which knowledge of specific content areas within each general category (e.g., knowledge about pupils) was perceived as crucial to the goals of the respondent's program.

Next, three different indices were computed for each belief category. First, the percent of items in each commonplace that were identified as statements with which program graduates should agree was added to the corresponding percent of items marked disagree to form the percent of "program-chosen" beliefs. Instruction focused on "program-chosen" beliefs would be designed to persuade candidates to adopt a particular stance in regard to the statement, a position consistent with program goals. The second index described the percent of items in each category marked ". . . graduates should form their own position after dealing with the statement as an open-ended issue . . ." and represents "student-chosen" beliefs. The third index was the percent of beliefs within each commonplace that were rated as "crucial" for the program to consider. (When computing the percent of items rated as crucial knowledge or as crucial beliefs, the denominator was the total number of responses within each category, including items marked "no opinion" or "insufficient information.")

V. Results:

Computations of the grand means for each of the four sets of profile scores provides a basis for comparing general levels of response across the four measures. As summarized in Table 3, these data suggest that the overall percent of times an area of professional knowledge was judged as crucial to the program was 31.1%. These values ranged from a low of 26.7% for the Academic Learning program to a high of 35.6% for the Heterogeneous Classrooms program, a difference that was not found to be statistically significant. (Tests of significance in this, and subsequent analyses, were conducted with .05 as the probability of a Type I error.)

TABLE 3

GRAND MEANS FOR
KNOWLEDGE AND BELIEFS INDICES

	Knowledge	Beliefs		
Program	Crucial Importance	Program Chosen	Student Chosen	Crucial Importance
Standard	32.3	60.8	18.8	21.1
Academic Learning	26.7	54.6	15.9	6.2
Heterogeneous Classrooms	35.6	56.3	26.1	27.4
Learning Communities	27.0	65.1	27.2	22.9
Multiple Perspectives	34.0	66.4	15.2	11.3
GRAND MEAN	31.1	60.6	20.6	17.6

Slightly more than 60% of all belief statements were endorsed as "program-chosen" beliefs. The range on this variable among the programs was about 12 percentage points and once again was not large enough to be significant. The grand mean for "students chosen" beliefs was 20.6% with a

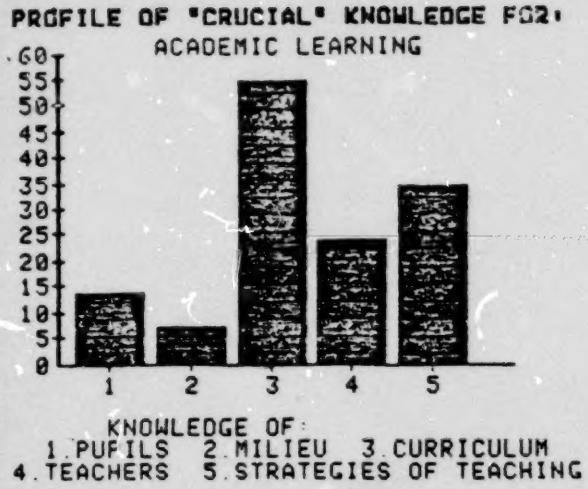
range of about 12 percentage points, again not significant. Thus far, it would appear that faculty perceptions of teacher preparation programs were such that they could be said to be rather opinionated (i.e., graduates ought to have a position that is allied to the program's for 60 percent of all statements of belief.) However, such a conclusion must be tempered by the observation that only 17.6% of the beliefs were identified as "crucial" for a given program to consider.

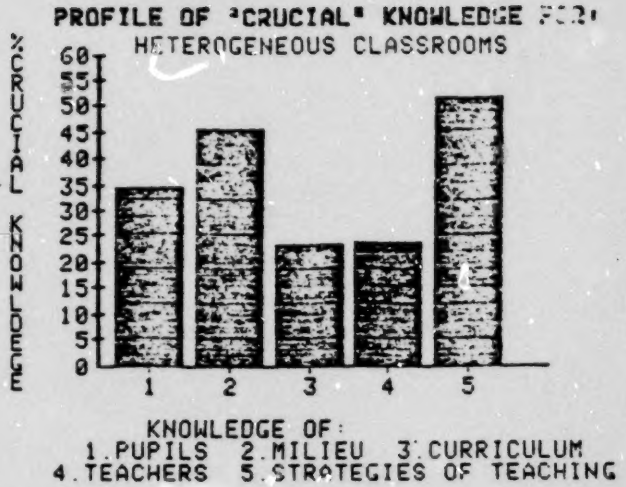
Although there were no reliable program differences in descriptions of the nature of opinions/beliefs that should be formed, there were across program differences in mean percent of belief statements judged as crucial for a program to consider. The faculty in Academic Learning judged only 6.2% of all belief statements to be of "crucial" concern to the program. This figure was significantly lower than the corresponding percents for the Standard Program (20.1%), the Learning Communities Program (22.9%), and the Heterogeneous Classrooms Program (27.4%).

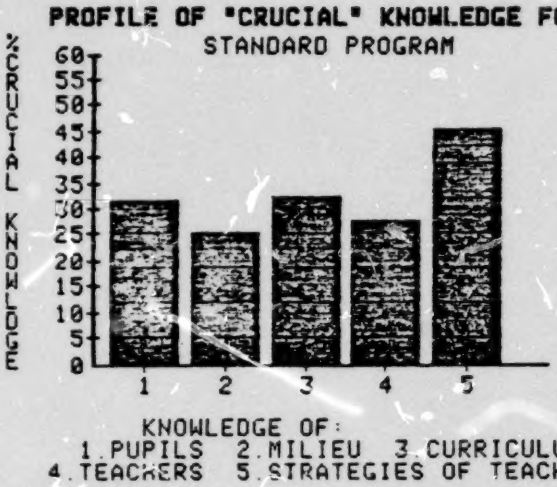
VI. Program Profiles:

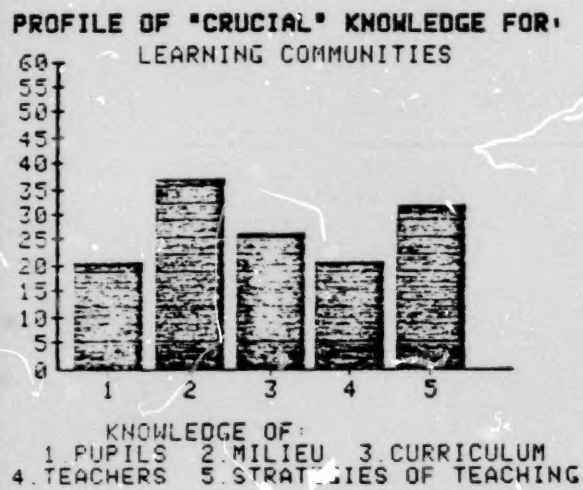
Program profiles portrayed in the bar graphs in Figures 1 and 4 indicate that faculty interpretations of program goals resulted in distinct differences in ratings of the importance of covering specific areas of knowledge or specific beliefs across the four commonplaces. These analyses also revealed some rather prominent among program similarities and differences.

Figure 1 presents the five program profiles for knowledge held to be "crucial" to realization of program goals. Repeated measures multivariate analysis of variance (MANOVA) tests revealed that with the exception of the Multiple Perspectives program, the alternative program profiles were









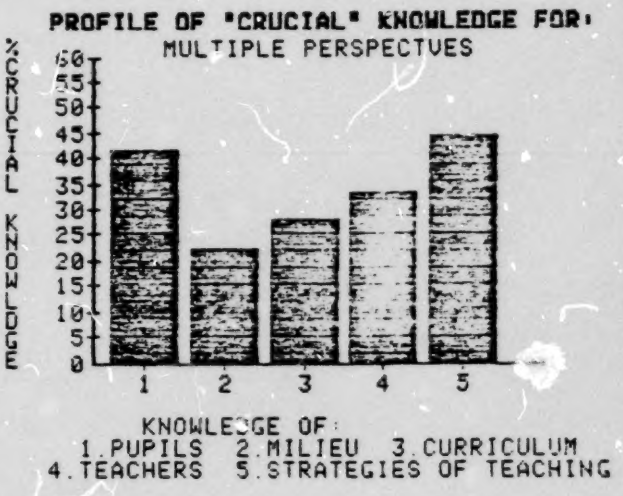


FIGURE 1

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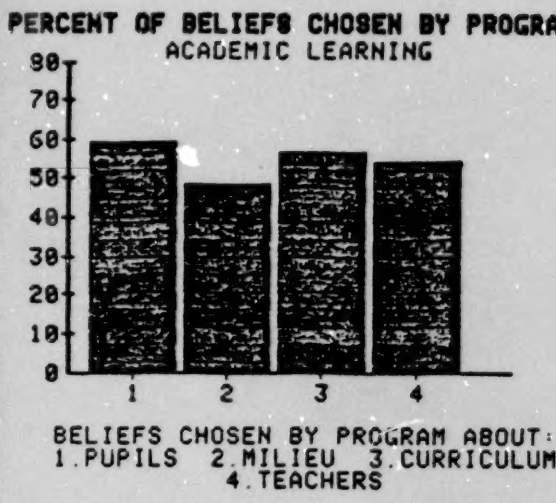
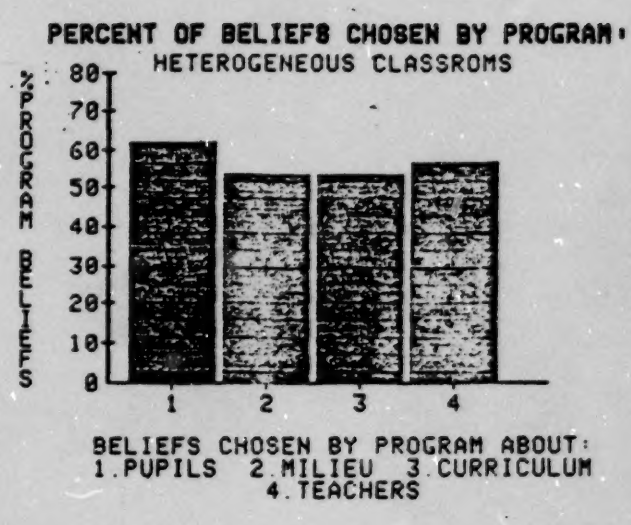
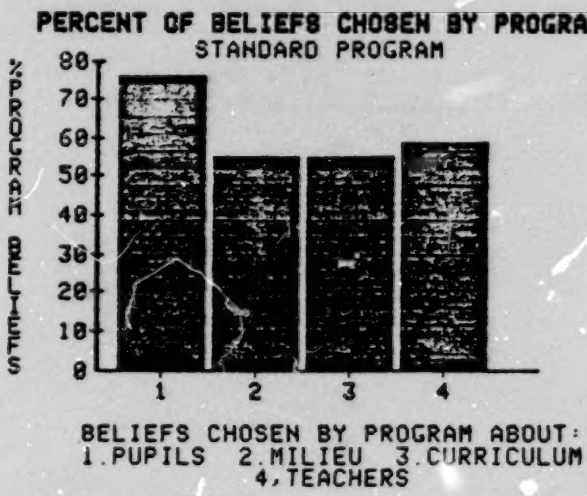
significantly different from the profile for the Standard program. Profile differences were concentrated primarily in the general categories of curriculum and milieu. For example, for the Standard Program, the average percent of items rated as crucial was 25.0% for milieu and 32.6% for curriculum. For the Academic Learning program, an average of only 6.9% of the items in the milieu category were rated as crucial, while an average of 54.5% of the items in the curriculum category received a crucial rating. The profiles for the Heterogeneous Classrooms and Learning Communities programs provide a dramatic contrast to the profile for Academic Learning. In both of these programs, the percent of items rated as crucial was greater in the milieu category (45.4% for Heterogeneous Classrooms and 36.9% for Learning Communities) than in the curriculum category (23.2% and 26.0%).

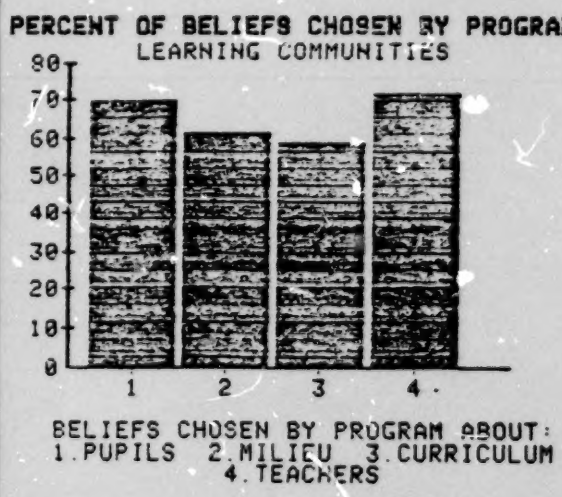
In sum, with regard to knowledge areas perceived to be crucial to the goals of a program, ratings of the importance of topics tended to be distributed in one of three patterns. The Standard and Multiple Perspectives programs reported relatively equal ratings of the importance of topics across the five knowledge categories. Faculty in the Heterogeneous Classrooms and Learning Communities programs interpreted program goals as assigning a relatively high level of importance to topics involving knowledge of the milieu and a relatively low level of importance to topics suggesting knowledge of the curriculum. Finally, Academic Learning stood alone in its very strong emphasis on topics reflecting knowledge of the curriculum and extremely low frequency of crucial ratings for topics suggesting knowledge of the milieu.

The profiles for belief statements were similarly examined by MANOVA Profile Analysis. When program profiles for "program-chosen" beliefs were studied (see Figure 2), there was no evidence for unique profiles associated with programs. When an aggregate profile for all programs was considered,









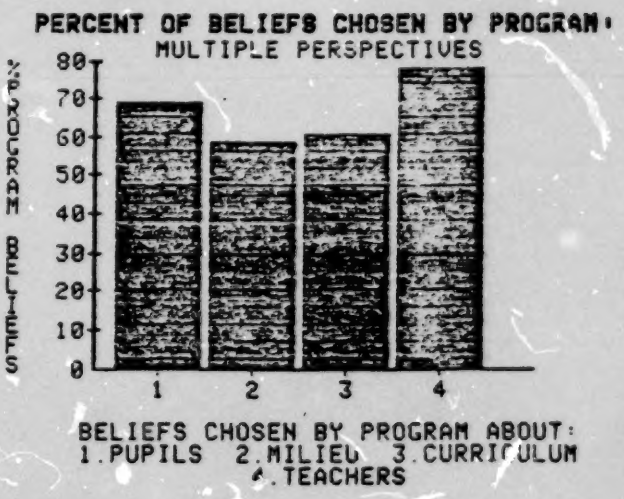


FIGURE 2

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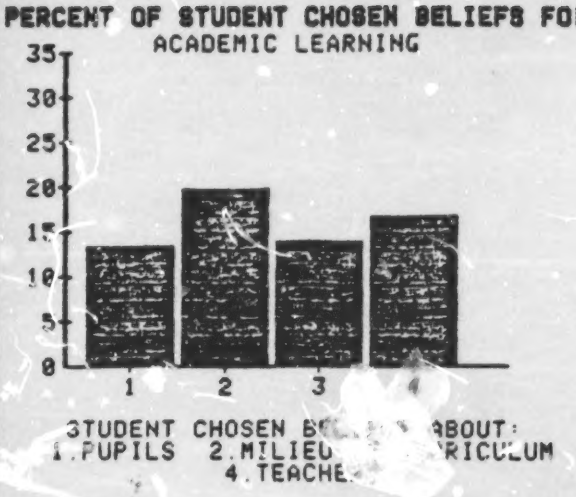
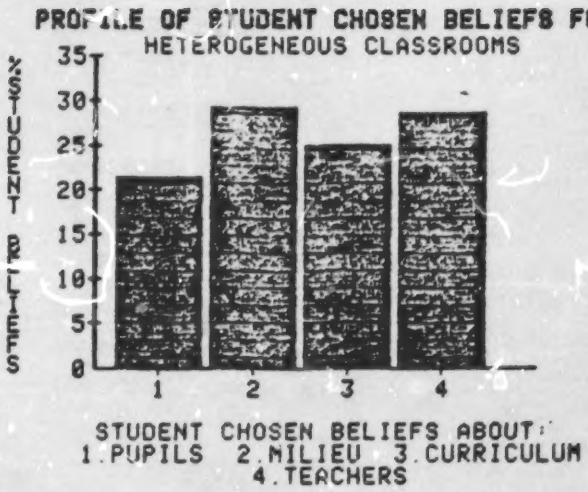
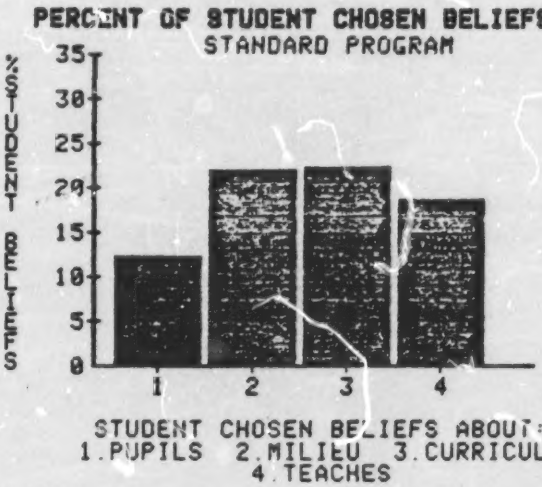
average of 67.9% of the belief statements about pupils were selected as program-chosen; i.e., rated as statements with which program graduates should agree or should disagree. The corresponding figures for the other three commonplaces were: 56.6% of the curriculum-related statements; 55.0% of the milieu items; and 63.6% of the beliefs about teachers. A statistical analysis revealed that the first and last measures were significantly higher than the middle two. According to faculty interpretations of program goals, programs are generally more willing to define the beliefs about pupils and about teachers that they want their students to form than is true for beliefs about the milieu or about the curriculum. In discussing these general profile differences, it is well to remember that all profile scores exceeded fifty percent. Program goals across all programs were interpreted as specifying the "correct" position for over one-half of all the belief statements.

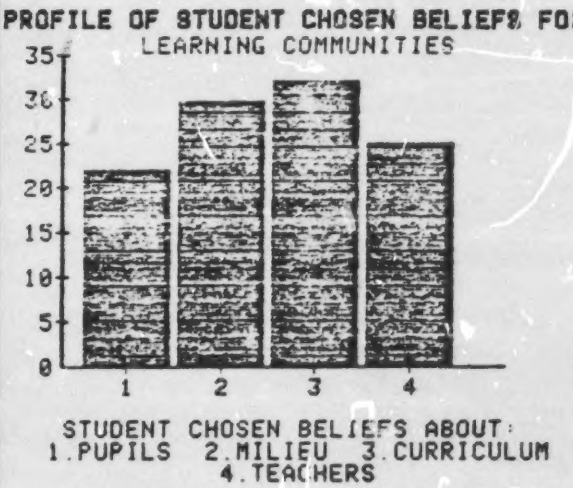
The profile analysis of student-chosen beliefs (beliefs treated as open-ended issues where students form their own positions) revealed no program uniqueness (see Figure 3). When the aggregate profile for all programs was tested, it was flat over all but one of the scales. The notable exception was for pupil-related beliefs. Here, the mean percent of student-chosen beliefs was significantly lower than that for milieu. When combined with the relatively high percent of statements about pupils that were rated as program-chosen beliefs, this finding may reflect the prominent role of educational psychology in teacher education. In general, programs are perceived as having a clear position on many patterns dealing with pupils and as less willing to allow students to make up their own minds on pupil-related issues.

The last analysis to be reported presents the findings relating to the percent of belief statements rated as crucial to a program's goals. As already noted (Table 3), the percent of beliefs perceived to be crucial to the









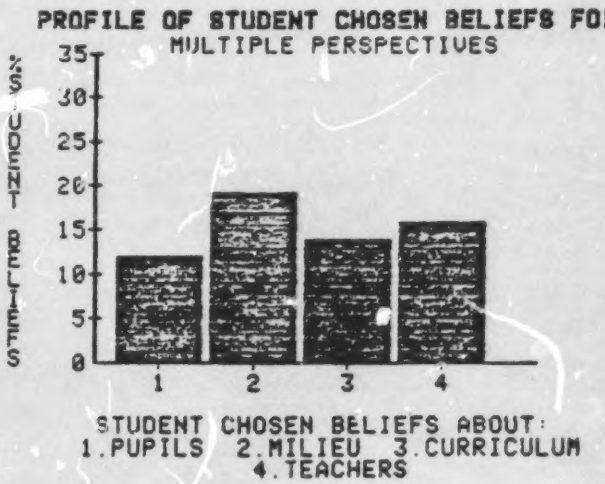


FIGURE 3

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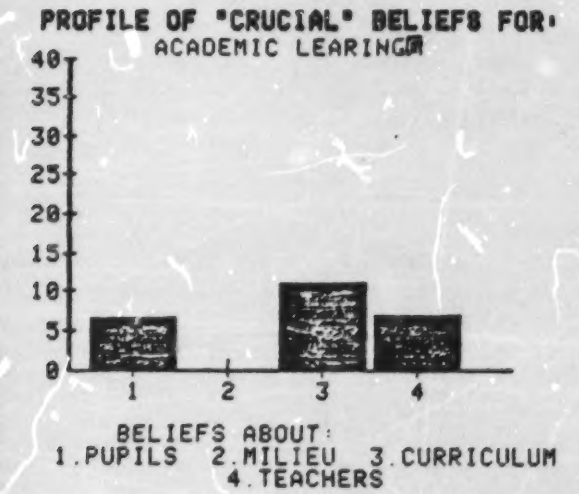

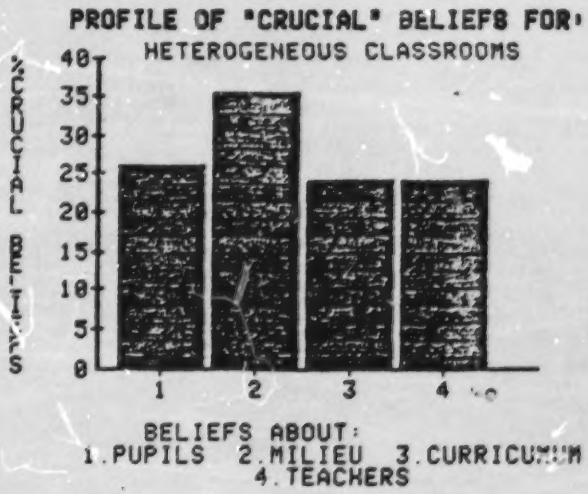

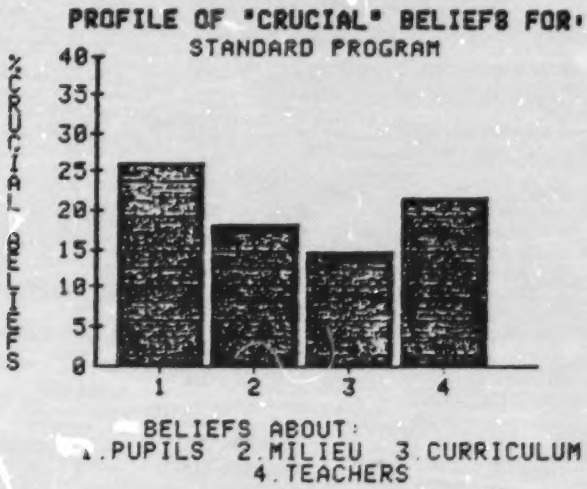

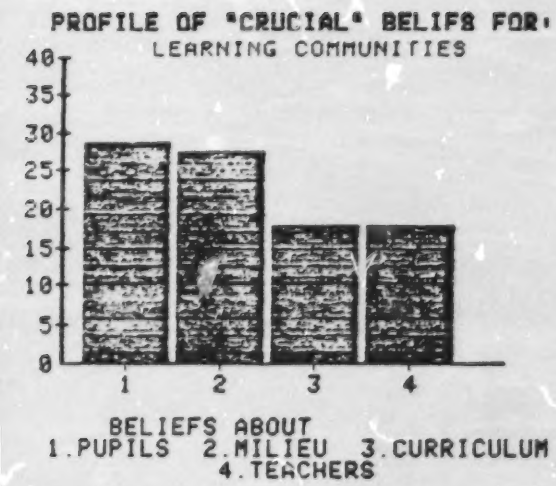

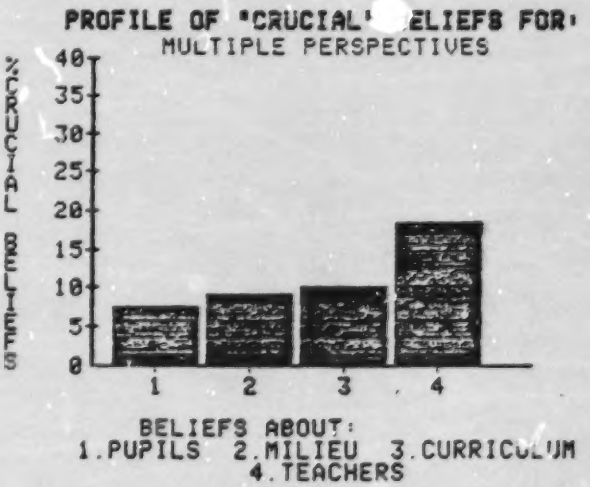

FIGURE 4

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goals of the Academic Learning program was significantly lower than the corresponding percent for the Standard program. Since both the Heterogeneous Classrooms and Learning Communities programs have mean response levels that are greater than the Standard program, differences between these two programs and the Academic Learning program were also significant.

Figure 4 portrays the profile of belief statements rated as "crucial" to program goals across the four subscales. Although these profiles appear to be highly dissimilar, a profile analysis contrasting each program with the Standard program indicated that none of the profiles was significantly different from that of the Standard program.

VII. Summary Statement:

The Teacher Knowledge and Beliefs Inventory was designed as a tool by which faculty and administrators could gain information on how the goals of MSU's alternative teacher education programs were perceived by those charged with their implementation. Toward that end, 43 faculty members across the five alternative programs completed the survey (55% of those surveyed).

Analyses focusing on between program variables served as the basis for this report. These analyses attempted to identify similarities and differences in faculty interpretations of program goals in specifying areas of professional knowledge and beliefs that should be emphasized in each program. The results indicated that the programs differed primarily in the level of importance attributed to areas of professional knowledge within the general categories of curriculum and milieu. Faculty perceptions of how beliefs should be presented did not differ significantly across programs. However,

faculty in the Academic Learning program were significantly less likely to indicate that it was crucial for the program to consider opinions/beliefs cited in the TKBI survey.

Most of the similarities and differences identified in this analysis were consistent with our interpretations of the unique orientation to teaching suggested by the goals of each alternative program. However, in our view, there are at least some program similarities and differences that could not have been predicted from available descriptions of each program's orientation. Unexpected findings of this type raise an intriguing question. "Given an apparent discrepancy between formal statements of program goals and the interpretation of those goals by program faculty, which should prevail?" Should efforts be made to change faculty perceptions or should the formal goals be restated? To the extent that this report prompts program faculty to consider apparent discrepancies of this type, it will have served its intended purpose.

VIII. References:

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